Combustion Webinar
June 9, 2010
Frequently Asked Questions

Are boilers located at electric utilities covered by the proposed boiler rules?
This will depend on the characteristics of each boiler.

- A boiler will be covered by the utility MACT if it meets the definition of an "electric utility steam generating unit" (EGU) contained in section 112(a)(8).
- A boiler is not an EGU if it does not meet the definition of an EGU contained in section 112(a)(8) (i.e., combustion unit of equal to or less than 25 MW or do not produce electricity for sale). This boiler will be covered under the boiler MACT or boiler area source rule.
- A boiler that does not burn any coal or oil, regardless of size, will be covered under the boiler MACT or boiler area source rule.
- We have not made a determination on combustion units of more than 25 MW that co-fire coal and/or oil with biomass (or anything else that isn't classed as a "solid waste"), in whatever respective quantities. This determination will be made as the Utility MACT rulemaking package is developed and reviewed.

How are natural gas-fired units regulated?
In the proposed major source boiler rule, new and existing natural gas-fired boilers are regulated with a work practice standard requiring that an annual tune-up be conducted for units equal to or greater than 10 MMBtu/hr and a biennial tune-up for units less than 10 MMBtu/hr.

Natural gas-fired boilers are not regulated by the proposed area source boiler rule.

How is the initial fuel category of a unit established?
In the proposed major and area source boiler rules, the definitions of the coal, biomass, and oil subcategories establish the initial fuel subcategory under which each boiler would be regulated.

Can a unit be switched to another fuel category or will it always have to meet those limits?
The proposed boiler major source rule covers major source boilers and process heaters that do not burn solid waste material. Similarly, the proposed boiler area source rule covers area source boilers that do not burn solid waste material. A major source boiler or process heater, or an area source boiler, would no longer be covered by these rules if it began burning solid waste. Instead, that unit would be covered by rules for solid waste incinerators.

In the proposed boiler major source rule, we are requesting comment on whether the owner of a boiler or process heater which has been burning solid waste should be able to choose coverage by the boiler rule (instead of the waste incinerator rules) if the owner agrees to an enforceable restriction that the unit will not burn solid waste in the future.

What is a traditional fuel?
Traditional fuels are fuels that have been historically managed as valuable fuel products rather than being managed as waste materials. Examples include fossil fuels (e.g., coal, oil, including used-oil meeting on-specification levels, natural gas), and their derivatives (e.g., petroleum coke, bituminous coke, coal tar oil, refinery gas, synthetic fuel, heavy recycle, asphalts, blast furnace gas, recovered gaseous butane, coke oven gas), as well as clean cellulosic biomass (e.g., green wood, forest thinnings, sawdust, bagasse, peanut shells, etc.). Traditional fuels are unused products that have not been discarded and therefore are not solid wastes. We are requesting comment in the proposed rule on whether there are other traditional fuels that we have not identified.

What are some examples of ingredients burned for energy recovery that would not be considered solid waste?

An ingredient in a manufacturing process (whether by the generator or a third party) that meets the legitimacy criteria (i.e., be managed as a valuable commodity, provide a useful contribution, be used to make a valuable product, and contain contaminants that are comparable or lower than in traditional products), would not be considered a solid waste. Examples include materials such as cement kiln dust, coal ash, and foundry sand that are used as ingredients in manufacturing processes (e.g., in cement kilns), so long as they satisfy the legitimacy criteria. For more information, please see the Flow Chart for Determining Whether Non-Hazardous Materials Used as Fuel In Combustion Units are Solid Waste

<http://www.epa.gov/epawaste/nonhaz/define/flow-fuel.htm>

and

Flow Chart for Determining Whether Non-Hazardous Secondary Material Ingredients Burned In Combustion Units are Solid Waste

<http://www.epa.gov/epawaste/nonhaz/define/flow-ingredient.htm>

Which rule would apply to units that burn mostly traditional fuels but also some solid waste?
A unit that burns mostly traditional fuels but also some solid waste would be subject to the Combustion and Solid Waste Incinerator (CISWI) rule. By definition, a CISWI unit is any distinct operating unit of any commercial or industrial facility that combusts any solid waste pursuant to Subtitle D of Resource Conservation and Recovery Act (RCRA).

Does the CISWI, Boiler Major Source Rule, or Boiler Area Source Rule apply to units that burn coal and clean biomass?
Depending on the major source status of the facility, the boiler major source rule or boiler area source rule would apply to boilers burning coal and pure biomass.

What is meant by "contaminated" construction & demolition debris?
By "contaminated," EPA means the material contains contaminants at levels that are not comparable or lower in concentration than traditional fuels. The proposal defines "contaminants" as all hazardous air pollutants (HAPs) listed under CAA section 112(b), as well as the nine pollutants required to be regulated under CAA section 129. An example of contaminated construction and demolition material is wood painted with lead-based paint that has not been sufficiently processed to produce a legitimate product (by removing the lead-based paint).

How are qualifying cogeneration facilities and qualifying small power producers that combust a homogeneous waste stream covered under these rules?
The CISWI Rule contains an exemption for qualifying small power producers, qualifying cogeneration units and metals recovery units pursuant to Section 129(g)(1) of the Clean Air Act. If a unit otherwise fits the definition of a major source boiler or process heater or an area source boiler, it would be subject to either the major source boiler or area source boiler rule.

What rules/testing is required for boilers under 10 MMBtu/hr?
In the proposed area source boiler rule, new boilers under 10 MMBtu/hr are subject to emission limits. New coal-fired boilers are subject to mercury (Hg), carbon monoxide (CO), and particulate matter (PM) limits, and new biomass-fired boilers and oil-fired boilers are subject to CO and PM limits. Initial and annual emissions testing are required for all boilers subject to emission limits.

In the proposed major source boiler rule, new boilers, except for units in the "Gas 1" subcategory, under 10 MMBtu/hr are subject to emission limits for Hg, CO, PM, dioxin, and HCl. Initial and annual emissions testing are required for all boilers subject to emission limits.

When do these rules take effect?
Existing affected boilers must achieve compliance with the applicable provisions in 40 CFR 63.7485 of subpart DDDDD (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institution Boilers and Process Heaters) for major source boilers, and in 40 CFR 63.11193 of subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources) for area source boilers, no later than 3 years after publication of the final rule. New affected boilers that start up on or before the publication of the final rule must achieve compliance no later than the date of publication of the final rule. New affected boilers that start up after publication of the final rule must achieve compliance upon startup.

For the CISWI Rule, the NSPS for new incineration units become effective six months after promulgation (i.e., December 16, 2010). The EG for existing incineration units become effective no later than three years after EPA approves a state plan implementing the EG or five years after the date they are promulgated, whichever is earlier.

Are "new" units identified by the proposed rule determined by publication date or by the publication date of the final rule?
New boilers and CISWI units are determined based on the date of publication of the proposed rule (i.e., June 4, 2010).

Where can I find the presentation materials from the June 9, 2010 webinar?
The webinar and presentation materials are available at
http://www.epa.gov/apti/broadcast.html#boilers060910